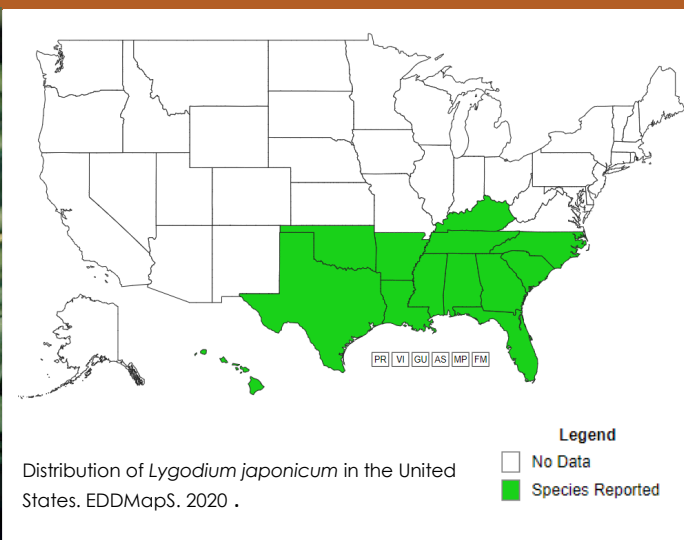


USACE Invasive Plant Species Best Management Practices

Japanese Climbing Fern (*Lygodium japonicum*) - Lygodiaceae (Fern and Allies)



Habitat & Life History

Low-lying, high rainfall areas – Native to Asia & Australia – FACW, FAC, & FACU – Perennial forb/vine – Reproduces asexually by producing sporophytes

Integrated Management Strategy Selections

Prevention Chemical Biological Mechanical Cultural



PREVENTION

- Proper containment/zoning may improve control



CHEMICAL CONTROL

- Herbicides—glyphosate, imazapyr, metsulfuron (high selectivity, FL only 24C label)
- Use-pattern—foliar, late season (July to early October) prior to peak spore release, may unintentionally harm biota that ferns are attached to

*Refer to product label for specific instructions on rate & use-pattern



BIOLOGICAL CONTROL

- Potential biological agent—*Neomusotima conspurcatis* (defoliating moth), *Floracarus perrepae* (gall mite), *Neostrombocerus* sp. (*Lygodium*-specific saw fly), *Manobia* sp. (flea beetles)



MECHANICAL CONTROL

- Hand pull, dig roots
- Mowing, cutting



CULTURAL CONTROL

- Prescribed burning



MANAGEMENT SEQUENCING

- Timing of control methods—best option is to perform chemical control in late summer/early fall before spore release
- Monitoring—continual monitoring & immediate removal of newly established plants, remove dead plant material to promote native vegetative growth
- Niche-filling/Restoration—conduct native plantings to combat competitive advantage of invaders



COMMENTS

- Regrowth from roots & spores requires continual management; mechanical methods may contribute to unintentional spread



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Contributors, data sources, documentation @ apcrp.el.erdc.dren.mil